Appl. No. 10/707,806
Amdt. dated May 30, 2006
Reply to Office action of March 08, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 (currently amended): A method of controlling data outputted from a peripheral device,
the peripheral device being installed on a computer system, the peripheral device
comprising a bus interface circuit and a controller, the bus interface circuit being
electrically connected to a bus of the computer system for controlling data transmission
between the peripheral device and the bus, the controller being electrically connected to
the bus interface circuit, the method comprising:
positioning at least a first storage block and a second storage block in the bus interface
circuit;
storing data outputted from the controller in the first storage block;
utilizing the bus interface circuit for simultaneously controlling the first storage block to
transfer data stored in the first storage block to the bus and controlling the second
storage block to store data outputted from the controller; and
~~utilizing the bus interface circuit to control the second storage block to transfer data~~
~~stored in the second storage block to the bus.~~
positioning a third storage block in the bus interface circuit; and
before data stored in the first storage block are completely outputted to the bus, the bus
interface circuit preventing the controller from transferring data to the bus interface
circuit if the second and third storage blocks are full.

2-5 (cancelled).

6 (currently amended): The method of claim 1 wherein a capacity of the first storage
block is equal to a capacity of the second storage block and the third storage block.

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7 (currently amended): The method of claim 1 wherein the bus is a PCI bus ~~or a PCIX bus~~.

8 (original): The method of claim 1 wherein the peripheral device is a data-retrieving

5   device.

9 (original): The method of claim 8 wherein the data-retrieving device is a network card, a hard-disk drive, or an optical disk drive.

10   10 (currently amended): The method of claim 1 wherein the first<u>, second,</u> and ~~second~~ <u>third</u> storage blocks operate according to a first-in-first-out (FIFO) storage mechanism.

11 (currently amended): A computer system comprising:
a bus;

15   a peripheral device comprising a bus interface circuit electrically connected to the bus, the
        bus interface circuit having at least a first storage block<u>,</u> [[and]] a second storage
        block<u>, and a third storage block</u>; and
a controller electrically connected to the bus interface circuit for simultaneously
        controlling the first storage block to transfer data stored in the first storage block to
20   the bus and for controlling the second storage block to store data outputted from the
        controller<u>,</u>
<u>wherein before data stored in the first storage block are completely outputted to the bus,</u>
        <u>the bus interface circuit prevents the controller from transferring data to the bus</u>
        <u>interface circuit if the second and third storage blocks are full.</u>

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12 (currently amended): The computer system of claim 11 wherein the bus interface
circuit further comprises:
a first switch electrically connected to the bus, the first storage block, [[and]] the second

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storage block, and the third storage block for selectively connecting the bus with

either the first storage block, [[or]] the second storage block, or the third storage block;

and

a second switch electrically connected to the bus, the first storage block, [[and]] the

5   second storage block, and the third storage block for selectively connecting the

controller with either the first storage block, [[or]] the second storage block, or the

third storage block.

13 (cancelled).

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14 (currently amended): The computer system of claim 11 wherein a capacity of the first

storage block is equal to a capacity of the second storage block and the third storage

block.

15   15 (currently amended): The computer system of claim 11 wherein the bus is a PCI bus or

a PCIX bus.

16 (original): The computer system of claim 11 wherein the peripheral device is a

data-retrieving device.

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17 (original): The computer system of claim 16 wherein the data-retrieving device is a

network card, a hard-disk drive, or an optical disk drive.

18 (currently amended): The computer system of claim 11 wherein the first, [[and]]

25   second, and third storage blocks operate according to a first-in-first-out (FIFO) storage

mechanism.

19-29 (cancelled).

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30 (New): A method of controlling data outputted from a peripheral device, the peripheral
device being installed on a computer system, the peripheral device comprising a bus
interface circuit and a controller, the bus interface circuit comprising a plurality of storage
5   blocks and being electrically connected to a bus of the computer system for controlling
data transmission between the peripheral device and the bus, the controller being
electrically connected to the bus interface circuit, the method comprising:
storing data outputted from the controller to a first storage block; and
transferring the stored data from the first storage block to the bus and simultaneously
10   storing data outputted from the controller to other storage blocks;
wherein the data transfer rate between the controller and the bus interface circuit is not
less than the data transfer rate between the bus interface circuit and the bus.

31 (New): A computer system comprising:
15   a bus;
a bus interface electrically connected to the bus, the bus interface having a plurality of
storage blocks; and
a controller electrically connected to the bus interface for simultaneously controlling the
transfer of stored data from a first storage block to the bus and storing data from the
20   controller to other storage blocks;
wherein the data transfer rate between the controller and the bus interface is not less than
the data transfer rate between the bus interface and the bus.

32 (New): The computer system of claim 31 wherein the bus interface further comprises:
25   a first switch electrically connected between the bus and the storage blocks for selectively
connecting the bus to one of the storage blocks; and
a second switch electrically connected between the controller and the storage blocks for
selectively connecting the controller to another one of the storage blocks;

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wherein the first switch and the second switch are respectively connected to different

storage blocks.

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